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G88-867 Forcing Spring Flowering Bulbs

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NebGuide

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Forcing Spring Flowering Bulbs

This guide discusses the various aspects of forcing spring flowering bulbs, including planting, cold treatment, forcing, care, and forcing in water.

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Introduction

Spring flowers can be a bright addition to any home. With just a little effort, many types of spring flowering bulbs can fill your home with flowers throughout the winter. Tulips, narcissus (daffodils), hyacinths, crocus, grape-hyacinths, scillas and other bulbs can be forced into midwinter bloom.

The term forcing can be a bit misleading. There is little force involved, but rather the bulbs receive their cold treatment early and are allowed to bloom out of season. The term forcing will be used throughout this publication for clarity.

The operation of forcing bulbs begins in the fall with the purchase of top quality bulbs. Inferior or damaged bulbs will be a disappointment when they fail to bloom. Select cultivars recommended for forcing, since some will work better than others. The bulbs should be planted anytime from early October through mid-November, then given a cold treatment and brought into a warmer area to be forced into bloom. After purchasing bulbs and up until the time they are planted, handle them carefully. Don't allow them to be in temperatures above 65°F.

Planting

Select either a clay or plastic pot for forcing bulbs. In most cases it is best to select a shallow container or bulb pan that will hold several bulbs. Bulb pans are about half as high as they are wide and won't tip over as easily as a taller pot. Tipping can be a problem if the bulbs get very tall when blooming. Be sure the pots are clean and sterile to avoid any disease problems. Washing in soapy water and then rinsing with a 10 percent bleach solution can help. Drainage is necessary for the bulbs and is best accomplished with drainage holes in the bottom of the pot. When using clay pots, soak them overnight before use to prevent the pot from absorbing moisture from the growing medium and depriving the bulbs.

Bulbs will grow in most soil mixes as long as there is an open structure and drainage is provided. Some organic matter in the mix may help to conserve moisture. It is not necessary to fertilize the bulbs since they have enough reserves stored for flowering one time.

Bulbs should not be buried deeply, but planted so that the noses of the bulbs are slightly exposed. Fill the pot partially, putting in just enough soil to hold the bulb at the proper level. Place the bulbs close together in the pot and fill in with more soil around the bulbs. Allow 1/2 to 1 inch of space at the top of the pot for easy watering.

Water the bulbs thoroughly immediately after planting by placing the pot in a shallow pan of water and allowing the pot to soak until the surface of the soil is moist. The pot should not require frequent watering, but must never be allowed to become completely dry.

Label each pot so that you know what variety of bulb is planted. It is best to put several bulbs of a single variety in a pot due to differences in blooming time. Generally 6 tulips, 3 hyacinths, 6 daffodils or 15 crocus will fit in a 6- or 7-inch pot. Due to their handsome flower type, hyacinths are occasionally planted singly in a pot.

Some bulbs, especially tulips, have a flat side. This flat side will produce the first and largest leaf. For the most striking display, place this flat side to the outer edge of the pot. This first leaf will gracefully cover the edge of the pot.

Cold Treatment

After the bulbs are planted they must be given a cold treatment. The temperature for this cold treatment should be maintained as close to 40°F as possible for about 10-15 weeks. The amount of time necessary in cold treatment will vary with the type of bulb and the cultivar.

There are several options for providing the cold treatment. As long as the pots are in the dark, aren't allowed to dry out or to freeze, any of the following will work well.

Some people will dig a pit or trench outdoors. The trench should be about I foot deep in a location that is easily accessible. Place the pots in the trench and pack with coarse sand for drainage and insulation. Cover the pots with mulch material to a depth that will prevent freezing. The pots are left in the trench until you are ready to bring them in to start forcing the flowers.

Another possibility outdoors is using a cold frame. Place the pots in a cold frame and cover with mulch or perlite. The same type of thing can be done in a window well.

Other possibilities are placing the pots in the corner of an unheated garage or basement. A cold storage room where fruits and vegetables are stored works well, as does an extra refrigerator. The main thing is being able to maintain a 40°F temperature.

If there is a problem with the pots drying out while they are being cooled, place the pots in perforated plastic bags.

Forcing

Mark a calendar to know when the bulbs should be removed from the cold. As this time approaches, check the pots for root development. If roots are growing out of the drainage hole, you can be fairly certain that there is enough development for forcing. Another check is to carefully remove the pot from the soil ball and check for a heavy mass of white roots. Many bulbs planted October I should be ready for forcing right after Christmas.

There is no need to bring all of the pots in for forcing at the same time. By staggering the time they are brought in, you can extend the season of blooming over most of the winter. At the time of forcing, small buds

should be appearing. Be careful not to damage the buds when removing the insulating material.

Bring the pots into a cool (50-60°F), bright (not direct sun) room to help shoot elongation. As the shoots develop, the pots can be moved to a warmer location. When the buds are showing color, once again move the pots to a cooler location, especially at night, to help the flowers last longer. Keep the pots watered throughout the blooming period.

On the average, bulbs will flower 3 to 4 weeks after forcing. As spring approaches the bulbs generally flower more rapidly. By bringing bulbs in every 2 weeks the succession of bloom can be continuous.

Hyacinths may have a problem with the flower stem not elongating. Placing the plants in the dark or covering them for a few days should bring out the flowers. If the flowers on any of the bulbs seem slow to open, a few days of warmer temperatures should result in rapid growth.

Care

Each pot of flowers should last a week to 10 days if it is treated properly. Best results will be achieved by placing them in a cool location at night, keeping them well-watered, and out of direct sunlight.

When the bulbs are done blooming, it is best to discard them since they rarely bloom satisfactorily again.

Forcing in Water

Several of the spring bulbs, including hyacinth, crocus and paperwhite narcissus, can be forced in water. These bulbs may be anchored in small pebbles or in special forcing glasses.

The use of the hyacinth glass has been popular since Victorian times. The glass is short and somewhat hourglass shaped. The upper cup of the glass keeps the bulb dry and free from rot and allows the roots to grow into the water in the lower compartment. Since this is an easy and very illustrative way to force the bulbs, it is an exciting and very educational project for children. Keep the vase cool (preferably under 50°F) and dark for 4 to 8 weeks until roots have developed and the shoot begins to elongate. Then bring he vase out to a bright window where the bulb will flower.

Shallow pans filled with pebbles are a common base for forcing paperwhite narcissus. The bulbs must be secured in the pebbles to prevent tipping of the bulbs and flowers when they bloom. Care must be taken to maintain the water level to the base of the bulbs, but not too much so that the bulbs will rot. Keep these bulbs in a cool, dark room for several weeks to provide for root growth and then move them to a bright location. Each of the bulbs will send up shoots with many tiny flowers.

Bulbs that have been forced in water should be discarded after flowering as these bulbs have also used all available reserves for blooming.

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